SHORT REPORT

Smoking cessation services are reducing inequalities

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The recent introduction of the Tobacco Advertising and Promotion Bill[1] follows a whole range of strategies and subsequent interventions aimed at reducing levels of smoking in the UK. In particular, *Smoking kills: a white paper on tobacco*[2] has resulted in national investments to develop smoking cessation services both in primary care and through specialist services elsewhere. National guidance on providing such services recommended developing them to meet the needs of local populations and consequently smoking cessation services within each health authority have adopted different delivery models.

Although smoking is an important threat to health across all demographics, it disproportionately affects the most deprived[3] and contributes to the gap in life expectancy between those most in need and those most advantaged more than any other identifiable factor. Thus, while the proportion of smokers in more advantaged groups is estimated at 15% for males and 13% for females in the most deprived groups levels are 39% and 34% respectively.[4] Recognising these disparities, a priority for smoking cessation services has been seen as helping people living in the most disadvantaged areas. However, national monitoring of these services is limited with only information on smokers who set quit dates and their success after four weeks being collated. Details of people who access services but do not set quit dates are not routinely recorded. Thus, while smoking cessation services recorded 132 500 smokers across England setting quit dates between April 2000 and March 2001, it is unclear whether services were disproportionately attracting people living in deprived areas and therefore having an impact on inequalities. Here, we analyse data from seven health authorities that collect an enhanced information set on all people (n=22 753) who attend smoking cessation services and examine their ability to attract people from deprived areas along with the overall success of the programme.

METHODS AND RESULTS

Data from seven former health authorities (508 wards; 18 primary care trusts) were collated into a central database, including all adults (aged over 17) who accessed smoking cessation services. Ward level population data by sex and age were obtained from the Office for National Statistics and the Index of Multiple Deprivation 2000[5] was selected as an appropriate deprivation measure. Using ward of residence, the population of the seven health authorities was allocated into deprivation quintiles (one being the least deprived and five the most) and using the same quintile categories people accessing smoking cessation services were allocated a ward based quintile.

Table 1 shows that disproportionately more people living in deprived areas are contacting smoking cessation services (column b). However, with increasing deprivation smaller proportions of those who have contacted services manage to set quit dates (column e). Thus, in the most deprived quintile, only 40.2% of males accessing the services set a quit date compared with over 50% for all other quintiles. However, despite this trend, greater proportions of people from deprived quintiles (column a) are still managing to set quit dates (column c). Furthermore, the relative proportion of the total population quitting smoking increased as deprivation increased (column h). Thus, in the least deprived quintile, only 0.05% of the total population quit smoking compared with 0.25% in the most deprived areas.

Table 1 People accessing NHS smoking cessation services, setting quit dates, and their success rates at four weeks*

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Deprivation quintiles †	Health authorities population, number (% of column total)	Accessing the services, number (% of column total)	Setting a quit date, number (% of column total)	Successfully quit‡ number	% Set quit date, of those accessing services	% Quit of those who accessed the services	% Quit of those who set a quit date	% Quit of the total population§
Men								
Least 1	187064 (13.2)	359 (4.0)	182 (4.3)	85	50.7	23.7	46.7	0.05
2	271748 (19.2)	1128 (12.7)	642 (15.3)	364	56.9	32.3	56.7	0.13
3	302448 (21.4)	1549 (17.5)	793 (18.9)	446	51.2	28.8	56.2	0.15
4	315213 (22.3)	2040 (23.0)	1058 (25.2)	549	51.9	26.9	51.9	0.17
Most 5	336800 (23.8)	3799 (42.8)	1527 (36.3)	826	40.2	21.7	54.1	0.25
χ^2 trend		column (a) *v* (b)	column (a) *v* (c)		column (b) *v* (d)	column (b) *v* (f)	column (b) *v* (f)	column (a) *v* (e)
p Value		217.1	26.5		41.6	23.8	9.21	25.2
		<0.001	<0.001		<0.001	<0.001	<0.005	<0.001
Women								
Least 1	200298 (13.3)	480 (3.5)	230 (3.6)	122	47.9	25.4	53.0	0.06
2	292852 (19.5)	1444 (10.4)	834 (13.0)	461	57.8	31.9	55.3	0.16
3	327017 (21.8)	2292 (16.5)	1128 (17.6)	617	49.2	26.9	54.7	0.19
4	333212 (22.2)	3101 (22.3)	1668 (26.0)	805	53.8	25.9	48.3	0.24
Most 5	349102 (23.2)	6561 (47.3)	2546 (39.7)	1285	38.8	19.6	50.5	0.37
χ^2 trend		column (a) *v* (b)	column (a) *v* (c)		column (b) *v* (d)	column (b) *v* (f)	column (b) *v* (f)	column (a) *v* (e)
p Value		696.0	55.0		126.0	30.9	9.16	35.9
		<0.001	<0.001		<0.001	<0.001	<0.005	<0.001

*January 2000–September 2001. †Deprivation data obtained from Department for the Environment, Transport and the Regions' Index of Multiple Deprivation. ‡Success at quitting smoking after four weeks. §Number of people who successfully quit as a percentage of the total population in each deprivation quintile.

COMMENT

NHS smoking cessation services are successfully attracting significant numbers of people from deprived areas. Currently, in the UK there are no specific figures available at ward level on numbers of smokers in the population and data linking prevalence of smoking with deprivation indices are not routinely available for small geographical areas. Such data are urgently required and in their absence it was not possible to analyse the proportions of the total smoking population setting quit dates and successfully quitting by deprivation. Furthermore, until services record the socioeconomic status of people it will not be possible to identify the exact demography of all smoking cessation clients and consequently the possibility of selective recruitment within each ward remains. However, our analyses did identify disproportionately more people from more deprived areas are accessing services, setting quit dates and successfully quitting. As the seven health authorities in this study established services following national guidance, similar outcomes would be expected across the North West Region. Consequently, this study shows that services are reducing inequalities between geographical areas. In the North West 3.3% of the estimated 3.1 million smokers have set quit dates via these services, of which about half successfully quit. For smoking cessation to optimally tackle inequalities, services need a greater understanding of why, once in contact with services, people from deprived areas are less likely to quit and how services may be changed to improve success for these key groups.

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